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ABSTRACT

Fifty-eight Iowa high school seniors participated in an experience based career education (EBCE) project conducted at Storm Lake, Sac City, and Pocahontas during 1976-77. The program followed the EBCE model developed by the Appalachia Educational Laboratory. Technical assistance and training for the project was furnished by that laboratory. A third-party evaluation was conducted and based on the examination of project records, including student research, interviews with project staff, student and resource persons, questionnaires completed by students, parents, and resource persons, and test data collected on students at the beginning and end of the semester. Posttest scores showed statistically significant (.05 level) gains made by the EBCE students in Mathematics concepts, mathematics application, and reading comprehension. However, the comparison group of students gained more on four scales of the career maturity inventory (occupational information, goal selection, planning, and problem solving), and the difference in gains on goal selection was statistically significant at the .05 level. Other findings reported that the EBCE students made statistically significant gains in attitude toward learning and careers and gained more in each attitude area than did the comparison students. This report contains detailed results of the evaluation, the measurement instruments, and statistical tables. (BM)

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ED147547

ANNUAL EVALUATION REPORT

1976-1977

EXPERIENCE BASED CAREER EDUCATION PROJECT

Administered by

IOWA CENTRAL COMMUNITY COLLEGE

Fort Dodge, Iowa

An Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

Project Number 502AH60021
Grant Number G07-76-00090(502)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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INTRODUCTION

This report is the third-party evaluation of the first year of operation of the Experience Based Career Education (EBCE) Project administered by Iowa Central Community College, Fort Dodge, Iowa. The report covers the period from October 1, 1976 through September 30, 1977. The period from October through January was spent in planning and preparation. Fifty-eight students were enrolled in the program during the second semester of the school year beginning in January.

The program was operated in three centers, Storm Lake, Sac City and Pocahontas. The program followed the EBCE model developed by the Applacian Educational Laboratory. Technical assistance and training for the project was furnished by that laboratory.

Their evaluation is based on examination of project records, including: student research, interviews with project staff, student and resource persons, questionnaires completed by students, parents and resource persons, and test data collected on students at the beginning and end of the semester.

Their report is organized into two parts. Part I includes an executive summary, a description of the evaluation design, general evaluation results, and conclusions. Part II includes detailed results of objective evaluation, measures and statistical tables.

EXECUTIVE SUMMARY

This project involved the development and operation of an Experience Based Career Education (EBCE) program in Iowa during 1976-77. The first semester of the school year was spent in developmental activities and the program was in operation during the second semester. The program served 58 students from 14 rural Iowa high schools.

MANAGEMENT

The project was well organized and managed. Tasks were accomplished on time as planned and fiscal control was good.

FACILITIES

Facilities used included a room in a high school building at two of the sites and two rooms in a separate building used for innovative programs at the third site. The facilities were adequate.

STAFF

The staff consisted on a director, two site analysts, four learning coordinators and a secretary. The site analysts were employed only during the time experience sites were being identified and developed. There was a problem with one of the site analysts but that problem was eliminated through termination of employment. The staff is very competent and has done an excellent job.

TRAINING

Training of the project staff was provided largely by AEL. The staff in turn provided training for local teachers, counselors and administrators. The training by both AEL and the project staff has been very good.

PUBLIC RELATIONS

Public relations activities have included: 24 meetings attended by about 450 persons, 20 articles published in eight area newspapers, two open houses, a radio program, and three newsletters. The public relations efforts were adequate but the general public could be better informed through increased use of radio and newspapers.

AEL TECHNICAL ASSISTANCE

Technical assistance for the project was furnished by the Appalacia Educational Laboratory (AEL). AEL was very cooperative, the AEL staff involved was competent, and good technical assistance was provided.

EXPERIENCE SITES

A total of 165 experience sites were developed, of which 135 were actually used by students. They included an appropriate number and variety of jobs, but will need to be expanded next year as the number of students increases.

STUDENTS

The 58 participating students were all high school seniors, 26 girls and 32 boys. Based on background, achievement and aspirations, they appeared to be a typical group of rural Iowa high school seniors.

OPINIONS OF STUDENTS, PARENTS, AND RESOURCE PERSONS

The opinion of students, parents and resource persons toward the EBCE program were very positive. The students felt that learning was meaningful through EBCE since they learned by doing and saw the practical application of what they were learning. They also liked the fact that learning was self-directed and the responsibility was placed on them. They liked the sites best where they were able to perform work rather than just watch. Their Primary concern was lack of communication with their home schools.

The parents were also very favorable toward the EBCE program. Most were glad their sons and daughters had been in the program and felt they learned more than they would have in regular school programs.

Almost all resource persons felt that they were provided with sufficient information about the program, that the students were interested in EBCE concepts and in their sites, and that they wanted to continue to participate in the program.

GROWTH IN BASIC SKILLS

The EBCE students did very well in basic skills. Comparison of pre- and post-test scores for the EBCE students showed statistically significant gains in all three areas measured--mathematics concepts, mathematics application and reading comprehension. When compared to expected gains as determined by national norms, the EBCE students gained more than would be expected in all three areas but the differences were not statistically significant at the .05 level. The EBCE students also gained more in all three areas than the comparison students with the difference in gain on mathematics application being statistically significant at the .05 level.

GROWTH IN CAREER MATURITY

The EBCE students gained in four areas measured by the Career Maturity Inventory (attitude, self, occupational information and planning) and lost ground on the other two (goal selection and problem solving). Although the

gains were fairly large, none of the gains or losses were statistically significant at the .05 level. The EBCE students did not fare well on career maturity when compared with the comparison group of students. The comparison students gained more on four of the scales (occupational information, goal selection, planning and problem solving) and the difference in gains on goal selection was statistically significant at the .05 level in favor of the comparison students.

GROWTH IN ATTITUDE

The EBCE students made statistically significant (.05 level) gains in attitude toward both learning and careers. They also gained in their attitude toward self and others but those gains were not statistically significant. The EBCE students gained more in each attitude area than did the comparison students and in attitude toward others the difference in gains was statistically significant at the .05 level.

EVALUATION DESIGN

Methods used for their evaluation included: observation, examination of records, interviews, questionnaires and administration of objective achievement and attitude instruments. Simple tabulations and descriptive statistics were used to describe the results of all procedures except the objective measurement instruments.

The design for the objective measurement instrument portion of the evaluation of this EBCE project was basically an experimental/control, pretest/post-test design. Fifty-eight students were randomly selected from the volunteers to participate in the EBCE program. Those students comprise the experimental group. However, complete data on only 55 students was available and is reported here. A like number of students were selected to serve as a control group but some of those had to be eliminated because they moved, dropped out of school or were absent on testing dates so the final control group consisted of 46 students. Pretest data on the experimental and control group students is shown in Table 0. As shown on that table, the two groups of students were closely matched on the characteristics measured. There was a statistically significant difference on only one of the 15 measures. That was on the mathematics application part of the Comprehension Test of Basic Skills where the control group of students scored significantly higher than the experimental group ($a = .05$).

Analysis of covariance was used to test the differences in gains over the semester between the two groups.

The following tests and subtests were used to measure gains over the semester:

Comprehensive Tests of Basic Skills
(CTB/McGraw-Hill, Level 4, Form S)

- Mathematics Concepts
- Mathematics Applications
- Reading Comprehension

Career Maturity Inventory
(CTB/McGraw-Hill)

- Attitude
- Self-Appraisal
- Occupational Information
- Goal Selection
- Planning
- Problem Solving

Student Attitude Survey
(Research for Better Schools)

- Learning
- Career
- Self
- Others

Socialization Profile

Males
Females

Characteristics of both the EBCE and the comparison students were gathered through a Student Information Questionnaire at the beginning of the semester. At the end of the semester, attitudes and opinions of students, parents and employers were gathered through the following instruments:

Student Attitude Questionnaire
Parent Opinion Survey
Employer Questionnaire

MANAGEMENT

A detailed management plan for this project was included in the proposal, pages 12-16 and 34-38. That plan was developed by the project director and a steering committee. Although some modifications to that plan were made as circumstances dictated, the plan remained essentially as originally formulated.

The project was well organized and managed, particularly in light of the broad geographic area served and the large number of persons involved in various roles. Appropriate financial records were kept and cost management and fiscal control were good.

FACILITIES

The facilities used for the project included:

Storm Lake: 2 rooms (21' X 27') in a separate building used for innovative programs.

Pocahontas: 1 room (20' X 30') in the high school building.

Sac City: 1 room (15' X 15') in the high school building.

Those facilities are minimally adequate.

STAFF

The project staff was employed on schedule as planned. In the early part of the project the staff consisted of:

1 Project Director
4 Learning Coordinators
2 Experience Site Analysts
1 Secretary

The experience site analysts finished their jobs and are no longer employed. Thus the current staff consists of the project director, four learning coordinators and the secretary. Two of the learning coordinators work at the Storm Lake center, one works at the Sac City center and the other at the Pocahontas center.

There were problems with one of the experience site analysts being able to accomplish the required tasks, but that problem was resolved through termination of that person's employment.

The project staff is highly competent and has done an excellent job. They are each particularly well suited for this type of project. That is evidenced by their excellent relations with students and resource persons. They are to be commended for a job well done.

TRAINING

Inservice training of staff, committees and school personnel was completed as scheduled. The following training activities were conducted by the project staff:

Sixteen training sessions were held for local school administrators. Those sessions were attended by 77 persons.

Two training sessions were held for school counselors. Those sessions were attended by 24 persons.

Three training sessions were held for faculty of participating schools. Those sessions were attended by 68 persons.

In addition, many administrators, counselors and teachers attended numerous orientation sessions held for students and parents.

AEL conducted training for the project staff as well as some administrators and committees. A total of 42 days training was provided by AEL, 10 days at the AEL offices in West Virginia and 32 days in Iowa. AEL was very cooperative in providing training and did a good job.

PUBLIC RELATIONS

Public relations efforts included: meetings, open houses, newspaper articles, radio, and newsletters:

- Four meetings were held for the general public. Those meetings were attended by 154 persons.
- Twenty articles about the project appeared in eight area newspapers.
- Nineteen meetings were held for educators. Those meetings were attended by 275 area teachers, counselors and administrators.
- Two open houses were held.
- A radio show about the project was broadcast.

- Project staff met with the State Board of Public Instruction to explain the program to them.
- Three project newsletters were published and broadly disseminated.

It appears that area educators, prospective students and their parents are well informed about the program. However, the general public could be better informed through increased use of newspapers and radio publicity.

PARENT PERMISSION

During Feoruary, 1977, the third-party evaluator examined the parent permission forms in the EBCE files and found them to be complete for all students.

AEL TECHNICAL ASSISTANCE

The Appalacia Educational Laboratory (AEL) Charleston, West Virginia, our final developer of this EBCE model, provided training and technical assistance for implemen ation of the model. A total of 42 days of training and technical assistance were provided, 10 days in Charleston and 32 days in Iowa. AEL was very cooperative and did an excellent job of providing training and technical assistance. Participating AEL staff included: Margo Brooks, Kris Lewis, Jack Sanders and Joe Shively.

EXPERIENCE SITES

A total of 165 experience job sites were developed and were available for student placement. Of that total, 135 were actually used. The number of job sites in each occupational cluster were:

9-Agriculture
2-Natural Resources and environment
8-Construction
11-Manufacturing
4-Transportation
18-Communications and Media
10-Product Services
29-Marketing and Distribution
24-Business and Office
3-Personal Services
10-Hospitality and Recreation
5-Home Economics
15-Health
4-Fine Arts and Humanities
16-Public Service

The jobs also covered 86 of the 114 possible worker trait groups. Thus an appropriate variety of job sites was available.

STUDENTS

A total of 58 students participated in the project, 40 at the Storm Lake center, 11 at Sac City and 7 at Pocahontas. All the students were seniors. Twenty-six were boys and 32 were girls. Detailed information about the students is provided in the Student Characteristics section of Part II of this report. The students as a group, appear to be quite typical rural Iowa high school seniors. They were above the national average in basic skills. As a group they were at the 58th percentile in math concepts, the 61st percentile in math application, and the 54th percentile in reading comprehension. Twenty-two percent of their fathers and 31 percent of their mothers had some education beyond high school. Fifty-five percent planned to continue their education after high school. Their most frequent choice as a long range goal was a professional career. A majority of their fathers were farmers, operators or managers, while most of their mothers were homemakers or clerks.

PROCESS OBJECTIVES

A number of process objectives were developed for this project. Those objectives are listed below, along with the accomplishments toward each objective.

1. A subcommittee will review a sample of at least ten percent of all EBCE curriculum materials by July, 1977, for evidence of sex bias and sex-role stereotyping.

A sex-role stereotyping subcommittee has been named and is functioning. The committee consists of eight educators representing a broad range of educational interests but includes only two women. The committee studied the jobs at the experience sites and rated them as to whether they would be traditionally held by males, females or both. The results were used to compile part of the data presented in the section on sex role stereotyping. However, the subcommittee has not yet examined EBCE curriculum materials.

2. Learning Coordinators will place at least ten percent of the EBCE students in nontraditional job exploration sites.

Student placements in nontraditional job explorations are shown in tables 11 and 12. As show in those tables, 26.9 percent of the boys and 75 percent of the girls were placed in at least one nontraditional job exploration. Overall, slightly more than half (53.4 percent) of the students were placed in at least one nontraditional job exploration, thus that objective was met.

3. Project staff will review by June 15, 1977, at least 25 percent of those experience sites selected by two or more EBCE students to assess the exposure of students to resource persons in nontraditional occupational roles.

Complete figures for placement of students with resource persons in nontraditional occupational roles are shown in table 24. As shown, 31 of explorations involved resource persons in nontraditional job roles. That is 15.2 percent of all explorations. Nineteen girls (59.4 percent) and

six boys (23.1 percent) had explorations of that type. Overall 25 of the 58 students (43.1 percent) of the EBCE students had at least one job exploration with a resource person in a nontraditional occupational role.

4. By April 30, 1977, at least 15 percent of the resource persons listed in the Log for Monitoring Resource Persons will be involved in nontraditional occupations.

Table 10 presents end of the year figures on the numbers of resource persons in nontraditional occupations. There were a total of 12 male resource persons in traditionally female jobs and 12 female resource persons in traditionally male jobs. Thus, in all, 24 of 135 (17.8 percent) of the resource persons were in nontraditional jobs. That objective was, therefore, met.

5. Project staff will review by June 15, 1977, all EBCE student placements and will document that at least ten percent of the placements resulted in students working with resource persons in nontraditional occupational roles.

The results for this objective were already given under objective 3 above. This objective was met.

6. Project staff will document by June 15, 1977, that at least two workshops have been held for staff conducted by Iowa Central Community College and Iowa State University on the dual themes of Elimination of Sex-Bias and Sex-Role Stereotyping and providing Sex-Free Guidance.

The first workshop was held on April 14, 1977 and the second on May 3, 1977.

7. Project staff will document the on-time of the tasks and milestones stipulated in plan of operation. (Part L, page 34-37).

All the tasks scheduled from September, 1976 through August, 1977 have been satisfactorily completed.

8. Project staff will document in quarterly reports to the Office of Education that the AEL and supplementary materials are being utilized to deliver an individualized program substantially in compliance with the narrative of this proposal and with the requirements of the 1976, Part D, Priority I announcement.

This has been done through the quarterly reports and has been verified by the third-party evaluator.

STUDENT OUTCOME OBJECTIVES

The student outcome objectives listed below were stated in the evaluation plan of the original proposal. Detailed data concerning the extent to which the objectives were met is provided in Detailed Statistics portion of this report (Part II). The results are summarized below.

Objective 1. EBCE students will do as well in basic academic skills as control students in traditional high schools.

The EBCE students gained more than the control students in each of the three basic skills areas measured, (Math concepts, Math application and Reading comprehension). The difference was statistically significant ($p<.10$) in the case of math application. (See table 4.) Their objective was, therefore, met.

Objective 2. EBCE students will acquire significantly greater ($p<.10$) mastery in career knowledge than control students in traditional high schools.

The EBCE students gained more than the control students on the self-appraisal part of the Career Maturity Inventory (CMI). However, the control students gained more on the Occupational Information, Goal Selection, Planning, and Problem Solving parts of the CMI. (See table 5).
The EBCE students also gained more than the control students on the Careers part of the Student Attitude Survey (SAS). (See Table 6). In the two cases where the EBCE students gained more than the control students, the differences in gains were not statistically significant ($p<.10$). Thus, their objective was not met.

Objective 3. EBCE students will acquire significantly great ($p<.10$) career maturity than control students in traditional high schools.

The Attitude part of the CMI was used to measure fulfillment of this objective. The EBCE students did gain more than the control students on this measure but the difference in gains were not statistically significant ($p<.10$) (See table 5). This objective, therefore, was not met.

Objective 4. Experimental students will develop significantly more positive ($p<.10$) atittudes toward learning environment than control students in traditional high schools.

The EBCE students did gain more than the control students in attitude toward learning as measured by the SAS. However, the statistical significance of the

differences was .12 rather than .10 as required by the objective. (See table 6.) Thus, this objective was almost met, but not quite.

Objective 5. EBCE students will develop significantly less ($p<.10$) sex-role stereotyping than control students in traditional high schools.

The Socialization Profile (SP) was used to measure attitudes toward both male and female sex roles. The EBCE students gained more than the control students in attitudes toward both male and female sex roles. In both cases the differences in gains were statistically significant ($p<.10$). (See table 7.) Thus this objective was met.

SEX ROLE STEREOTYPING

One objective of the EBCE project was the reduction of sex-role stereotyping. The process included placement of students in job experiences where the jobs were traditionally held by persons of the opposite sex and having students work with resource persons who held jobs traditionally held by persons of the opposite sex. The affect in terms of student outcomes was measured through the Socialization Profile which measures attitude toward sex roles. Details placement and attitude are provided in the Sex Role Stereotyping and Socialization Profile sections of Part II of this report (see in particular tables 7 and 10-14).

Of the 135 job sites used, 63 were traditionally male, 44 were traditionally female, and 28 were classified as both. A total of 24 resource persons (12 males and 12 females) held jobs that were nontraditional for their sex, that was 17.8 percent of the total resource persons. Over half (53.4 percent) of the EBCE students explored a job that was nontraditional for their sex at least once. Also, over half (51.7 percent) of the students had at least one job experience with a resource person of the opposite sex. (See tables 10-14.)

Changes in attitudes of EBCE students were compared to changes in attitudes of the control students. The differences in changes in attitudes toward male roles and female roles favored the EBCE students and the differences between the EBCE and control students were statistically significant. ($p<.10$).

OPINIONS OF STUDENTS, PARENTS AND RESOURCE PERSONS

Questionnaires were used to elicit the opinions of students, parents and resource persons toward the EBCE program. The instruments used and the complete results are provided in the sections labeled Student Attitude Questionnaire, Parent Opinion Survey and Resource Persons Opinions of Part II

of this report. All three groups - students, parents and resource persons were very positive in their opinions and attitudes toward the program.

The students felt that learning through EBCE was especially meaningful since they learned by doing and saw the practical application of what they were learning. They also liked the fact that learning was largely self-directed and responsibility for learning was placed on them. They were especially positive toward sites where they were able to be actively involved in doing jobs rather than just watching. The students felt that the greatest weakness of the program was the lack of communication they had with their home schools. They missed their friends and school activities.

Parents were also very positive in their opinions of the EBCE program. (See table 8.) The majority felt that:

- Their children were better off in EBCE than they would have been in regular school programs.
- If they had to do it over again, they would want their children to participate in EBCE.
- Their children liked EBCE as well as or better than regular school programs.
- They received enough information about their childrens' progress.
- EBCE provided students more opportunity to learn about occupations than regular schools.
- EBCE helped their children form career plans.
- EBCE provided more opportunity for general learning than regular schools.
- Students were more modivated to learn through EBCE.

The results of the Resource Persons' Questionnaire show that the resource persons view the EBCE program very favorably. (See table 9). Most resource persons felt that:

- The EBCE staff provided them with the necessary information to help them direct student activities.
- The staff explained reasons for particular placements to them.
- The students were interested in their sites and in the concepts of EBCE.
- Both employees and top-level management were favorable toward the program.
- The program was effective.
- They would continue working with the program.

PART II

STUDENT CHARACTERISTICS

Results of pretest measures on both the EBCE and comparison students are shown in table O. As shown, the two groups were quite closely matched on all measures. The only difference that was statistically significant was on the math application part of the CTBS.

Other characteristics of students involved in the EBCE program, as well as the students in the control group, are shown in Table 1. There was little difference in the characteristics of the EBCE and control students. None of the differences was statistically significant at the .05 level and none appears so great that it would affect other comparisons made between the two groups.

The characteristics of the EBCE students appear to be about the same as would be found in any group of rural Iowa high school seniors. Twenty-two percent of the students' fathers and thirty-one percent of their mothers had some education beyond high school. The most popular choice as a long-range goal was a professional career. Fifty-five percent planned to continue their education after high school. A majority of their fathers were farmers, operators or managers, while most of their mothers were homemakers or clerks.

Table O

Comparison of EBCE and Comparison Student Pretest Scores

	EBCE		Comp.		
Measure	Mean	S.D.	Mean	S.D.	Difference
CTBS					
Math Concepts	19.36	3.75	19.76	3.59	-.40
Math Application	18.11	4.64	20.37	4.04	-2.26*
Reading Comp.	32.93	7.03	35.11	5.06	-2.18
CMI					
Attitude	37.15	4.18	37.59	4.71	- .44
Self-Appraisal	14.89	3.11	14.80	3.14	.09
Occup. Info.	17.60	2.30	17.35	3.05	.25
Goal Selection	14.67	2.69	14.24	3.21	.43
Planning	14.96	3.41	15.04	3.75	- .08
Problem Solving	12.93	2.36	12.02	3.49	.91
SAS					
Learning	335.31	56.98	333.39	51.62	1.92
Careers	378.31	49.26	374.02	44.93	4.29
Self	372.66	52.80	364.63	46.44	8.03
Others	381.46	46.09	382.72	40.22	-1.26
SP					
Male	1679.95	140.01	1662.70	125.84	17.25
Female	1650.82	138.04	1650.57	148.63	.25

* Difference statistically significant at .05 level.

Table 1

STUDENT CHARACTERISTICS

STUDENT INFORMATION QUESTIONNAIRE

EBCE N	EBCE %	NON EBCE N	NON EBCE %	
				1. Are you:
24	44	17	37	☐ Male
31	56	29	63	☐ Female
				2. Are you:
55	100	46	100	☐ White
0	0	0	0	☐ Black
0	0	0	0	☐ Oriental
0	0	0	0	☐ Spanish Descent (Chicano, Puerto Rican, etc.)
0	0	0	0	☐ Native American
0	0	0	0	☐ Other (specify) _____
				3. What is your current grade level (as of September, 1976)?
0	0	0	0	☐ 10th grade
0	0	0	0	☐ 11th grade
55	100	46	100	☐ 12th grade
				4. What is your birth date?

_____ MONTH _____ DAY _____ YEAR

EBCE N	EBCE %	NON EBCE N	NON EBCE %	
				5. What is your father's highest level of formal education completed?
0	0	0	0	☐ None
1	2	1	2	☐ Elementary School
6	11	7	15	☐ Some High School
36	65	28	61	☐ High School Graduate
6	11	7	15	☐ Some postsecondary (for example, some college, junior college, business school, trade or technical school)
0	0	7	15	☐ College graduate (four-year degree)
1	2	0	0	☐ Some graduate work
5	9	2	11	☐ Advanced degree (specify) _____
				6. What is your mother's highest level of formal education completed?
0	0	0	0	☐ None
3	5	0	0	☐ Elementary School
5	9	2	4	☐ Some High School
30	55	25	54	☐ High School Graduate
9	16	10	22	☐ Some post-secondary (for example, some college, junior college, business school, trade or technical school)
7	13	7	15	☐ College graduate (four-year degree)
1	2	3	7	☐ Some graduate work
0	0	0	0	☐ Advanced degree (specify) _____
				7. How many of your brothers and sisters dropped out of school?
50	91	42	91	___ None
3	5	3	7	___ One
1	2	0	0	___ Two
1	2	1	2	___ Three
0	0	0	0	___ Four
0	0	0	0	___ Five or More

EBCE N	EBCE %	NON EBCE N	NON EBCE %	
				8. What are your long-range goals? Check only one.
7	13	3	7	☐ 1. CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent
4	7	1	2	☐ 2. CRAFTSMAN such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter
1	2	3	7	☐ 3. FARMER, FARM MANAGER
2	4	3	7	☐ 4. HOMEMAKER OR HOUSEWIFE
1	2	0	0	☐ 5. LABORER such as construction worker, car washer sanitary worker, farm laborer
6	11	3	7	☐ 6. MANAGER, ADMINISTRATOR such as sales manager, office manager, school admin istrator, buyer, restaurant manager, government official
1	2	0	0	☐ 7. MILITARY such as career officer, enlisted man or woman in the armed forces
1	2	1	2	☐ 8. OPERATIVE such as meat cutter, assembler, machine operator, welder, taxicab, bus, or truck driver, gas station attendant
15	27	17	57	☐ 9. PROFESSIONAL such as accountant, artist, clergyman, dentist, physician, registered nurse, engineer, lawyer, librarian, teacher, writer, scientist, social worker, actor, actress
2	4	2	4	☐ 10. PROPRIETOR OR OWNER such as owner of a small business, contractor, restaurant owner
1	2	0	0	☐ 11. PROTECTIVE SERVICE such as detective, policeman or guard, sheriff, fireman
1	2	1	2	☐ 12. SALES such as salesman, sales clerk, advertising or insurance agent, real estate broker
1	2	2	4	☐ 13. SERVICE such as barber, beautician, practical nurse, private household worker, janitor, waiter
4	7	5	11	☐ 14. TECHNICAL such as draftsman, medical or dental technician, computer programmer
4	7	3	7	☐ 15. OTHER (specify) _____
4	7	2	4	☐ 16. DON'T KNOW

EBCE N	EBCE %	NON EBCE N	NON EBCE %	
				9. What do you expect to be doing one year after completing high school?
16	29	7	15	☐ Working full-time
1	2	0	0	☐ Entering an apprenticeship or on-the-job training program
1	2	0	0	☐ Going into regular military services or to a service academy
1	2	0	0	☐ Being a full-time homemaker
8	15	12	26	☐ Attending a vocational technical, trade or business school
2	4	1	2	☐ Taking academic courses at junior or community college
3	5	5	11	☐ Taking technical or vocational subjects at a junior or community college
17	31	21	46	☐ Attending a four-year college or university
4	7	0	0	☐ Working part-time
2	4	0	0	☐ Other (travel, take a break, no plans)
				10. What is your major field of study?
29	53	19	41	☐ General Curriculum
10	18	8	17	☐ Vocational Education Curriculum
12	22	19	41	☐ College Preparatory Curriculum
4	7	0	0	☐ Other (specify)

11. Under FATHER, circle the one number that best describes the work done by your father (or male guardian). Under MOTHER, circle the one number that best describes the work done by your mother (or female guardian). The exact job may not be listed but circle the one that comes closest. If either of your parents is out of work, disabled, retired, or deceased, mark the kind of work that he or she used to do.

(Circle one number in each column.)

	Father	Mother	Father EBCE N	Father EBCE %	Father NON-EBCE N	Father NON-EBCE %	Mother EBCE N	Mother EBCE %	Mother NON-EBCE N	Mother NON-EBCE %
CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent	01	01	1	2	0	0	9	16	8	17
CRAFTSMAN such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter	02	02	6	11	5	11	0	0	0	0
FARMER, FARM MANAGER	03	03	11	20	17	37	0	0	0	0
HOMEMAKER OR HOUSEWIFE	04	04	2	4	0	0	23	42	22	48
LABORER such as construction worker, car washer, sanitary worker, farm laborer	05	05	2	4	2	4	2	4	1	2
MANAGER, ADMINISTRATOR such as sales manager, office manager, school administrator, buyer, restaurant manager, government official	06	06	7	13	5	11	2	4	1	2
MILITARY such as career officer, enlisted man or woman in the armed forces	07	07	1	2	0	0	0	0	0	0
OPERATIVE such as meat cutter, assembler, machine operator, welder, taxicab, bus or truck driver, gas station attendant	08	08	8	15	5	11	3	5	0	0
PROFESSIONAL such as accountant, artist, clergyman, dentist, physician, registered nurse, engineer, lawyer, librarian, teacher, writer, scientist, social worker, actor, actress	09	09	5	9	8	17	7	13	6	13
PROPRIETOR OR OWNER such as owner of a small business, contractor, restaurant owner	10	10	5	9	3	7	0	0	0	0
PROTECTIVE SERVICE such as detective, policeman or guard, sheriff, fireman	11	11	0	0	1	2	0	0	0	0
SALES such as salesman, sales clerk, advertising or insurance agent, real estate broker	12	12	5	9	0	0	4	7	3	7
SERVICE such as barber, beautician, practical nurse, private household worker, janitor, waiter	13	13	3	5	0	0	4	7	5	11
TECHNICAL such as draftsman, medical or dental technician, computer programmer	14	14	0	0	0	0	0	0	0	0

EBCE STUDENT GROWTH

Growth of EBCE students over the semester was measured by administering four instruments at the beginning and end of the semester. The instruments used were Comprehensive Test of Basic Skills (CTBS), Career Maturity Inventory (CMI), Student Attitude Survey (SAS) and Socialization Profile (SP). The results are shown in Table 2.

CTBS

The EBCE students gained from pretest to post-test administration in all three areas measured by the CTBS--Mathematics Concepts, Mathematics Application and Reading Comprehension. As measured by a t test for mean differences between dependent variables, all gains were statistically significant at the .05 level.

CMI

The EBCE students gained on four areas measured by the Career Maturity Inventory (attitude, self, occupational information and planning) but dropped in the other two areas (goal selection and problem solving). None of the gains or loses was statistically significant at the .05 level but each of the gains was quite large.

SAS

The EBCE students gained in all four areas of attitude measured by the Student Attitude Survey (learning, careers, self and others). The gains in attitude toward learning and careers were statistically significant at the .05 level.

SP

The Socialization Profile (SP) measures sex role attitudes. Attitudes toward both male roles and female roles are measured. The higher the score, the more a person's attitudes reflect sex role stereotyping. Thus, a program with activities to reduce sex role stereotyping should result in lowering of scores. As shown by Table 7, that was the case in attitudes toward both male and female roles. The reduction in stereotyping of female roles was statistically significant at the .05 level.

Table 2

Differences Between Pretest and Post-test Scores
for EBCE Students on the CTBS, CMI, SAS and SP

	Pre-test			Post-test				
Instrument/Subtest	Mean	S.D.	Percentile	Mean	S.D.	Percentile	Gain	t
CTBS								
Math Concepts	19.36	3.75	58	20.29	3.52	63	.93	2.68*
Math Application	18.11	4.64	61	19.04	4.17	63	.83	2.18*
Reading Comp.	32.93	7.03	54	34.56	6.23	59	1.63	2.14*
CMI								
Attitude	37.15	4.18	49	37.96	3.74	55	.81	1.71
Self	14.89	3.11	51	15.51	2.49	59	.62	1.63
Occup. Info.	17.60	2.30	73	17.95	1.83	77	.35	1.07
Goal Selection	14.67	2.69	48	14.58	2.51	47	-.09	- .25
Planning	14.96	3.41	59	15.55	3.84	65	.59	1.24
Problem Solving	12.93	2.36	75	12.67	3.02	73	-.26	- .63
SAS								
Learning	335.31	56.98		369.59	49.65		34.18	5.22*
Careers	378.31	49.26		400.53	54.22		22.22	3.51*
Self	372.66	52.84		378.87	54.89		6.21	.95
Others	381.46	46.09		386.97	56.07		5.51	.87
SP								
Males	1679.95	140.01		1668.24	150.05		11.71	.56
Females	1650.82	138.04		1591.26	129.56		40.44	2.61*

* Difference between means statistically significant at .05 level.

GROWTH OF EBCE STUDENTS COMPARED WITH GROWTH OF STUDENTS IN REGULAR SCHOOL PROGRAMS

EBCE student growth was measured by administering the following instruments at the beginning and again at the end of the semester: Comprehensive Tests of Basic Skills (reading comprehension, mathematics concepts and mathematics applications), Career Maturity Inventory, Student Attitude Survey and Socialization Profile. The same instruments were administered to the comparison students at both the beginning and end of the semester. The results, along with analysis of covariance tests of differences in gains between the EBCE and comparison students, are shown in the following tables. The F values shown in the tables are the results of tests of differences in gains between the EBCE and comparison students using analysis of covariance with the pretest scores as the covariates.

COMPREHENSIVE TESTS OF BASIC SKILLS (CTBS)

EBCE student growth in basic skills, as measured by the CTBS, was compared with expected growth determined by national norms and growth of the comparison students. The results of the comparisons with national norms are shown in Table 3 while the results of comparisons with the comparison group of students are shown in Table 4.

As shown by Table 3, the EBCE students gained more than expected, as determined by national norms, in all three basic skills areas--mathematics concepts, mathematics application and reading comprehension. The differences were quite large but none was statistically significant at the .05 level.

Table 4 shows that the EBCE students gained more than the comparison students in all three basic skills areas. The difference in gains on mathematics applications was statistically significant at the .05 level. Thus, it is concluded that EBCE students gained at least as much in basic skills as the comparison students and gained more in mathematics applications.

Table 3

Comparison of EBCE Student Gains
on the CTBS with Expected Gains

Subtest	Pretest Mean	Expected Post-test Mean	Actual Post-test Mean	Difference = Actual - Expected	t
Math Concepts	19.36	19.42	20.29	.87	1.81
Math Application	18.11	18.39	19.04	.65	1.14
Reading Comp.	32.93	33.44	34.56	1.12	1.17

Table 4

Comparison of Pretest and Post-test Scores
of the EBCE and Comparison Students on
the Comprehensive Tests of Basic Skills

		Pretest			Post-test				Diff. in		
Subtest	Group	Mean	S.D.	% tile	Mean	S.D.	% tile	Gain	Gains	F	P
Math Concepts	EBCE	19.36	3.75	58	20.29	3.52	63	.93	.36	.31	.59
	Comp.	19.76	3.59	60	20.33	3.63	64	.57			
Math Application	EBCE	18.11	4.64	61	19.04	4.17	63	.83	1.53	4.44	.04
	Comp.	20.37	4.04	72	19.67	4.16	67	-.70			
Reading Comprehension	EBCE	32.93	7.03	54	34.56	6.26	59	1.63	2.09	1.94	.17
	Comp.	35.11	5.06	62	34.65	6.16	59	-.46			

CAREER MATURITY INVENTORY (CMI)

The CMI results are shown in Table 5. The EBCE students gained in four of the scales but dropped in two. The comparison students gained in all four areas. The differences in gains favored the EBCE students on two scales and favored the comparison students on the other four. The differences were small and can be attributed to chance variations, except in the case of goal selection where the difference, favoring the comparison students, was statistically significant.

Thus, it is concluded that the comparison students gained at least as much as the EBCE students on all scales of the CMI and gained more on the goal selection scale.

Table 5

Comparison of Pretest and Post-test Scores of the EBCE and Comparison Students on the Career Maturity Inventory

		Pretest			Post-test						
Scale	Group	Mean	S.D.	% tile	Mean	S.D.	% tile	Gain	Diff. in Gains	F	p
Attitude	EBCE	37.15	4.18	49	37.96	3.74	55	.81	.53	.29	.59
	Comp.	37.59	4.71	52	37.87	4.04	54	.28			
Self-Appraisal	EBCE	14.89	3.11	51	15.51	2.49	59	.62	.01	.02	.88
	Comp.	14.80	3.14	50	15.41	2.29	58	.61			
Occupational Information	EBCE	17.60	2.30	73	17.95	1.83	77	.35	-.04	.08	.78
	Comp	17.35	3.05	70	17.74	2.93	75	.39			
Goal Selection	EBCE	14.67	2.69	48	14.58	2.51	47	-.09	-1.39	5.98	.02
	Comp.	14.24	3.21	44	15.54	2.54	58	1.30			
Planning	EBCE	14.96	3.41	59	15.55	3.84	65	.59	-.04	.02	.88
	Comp.	15.04	3.75	59	15.67	2.89	66	.63			
Problem Solving	EBCE	12.93	2.36	75	12.67	3.02	73	-.26	-.58	.01	.99
	Comp.	12.02	3.49	66	12.35	3.30	70	.32			

STUDENT ATTITUDE SURVEY (SAS)

The SAS results are shown in Table 6. The attitudes of EBCE students improved in all faces of the areas measured while the attitudes of the comparison students improved on the learning and careers scales but dropped on the self and others scales. All four of the differences in gains favored the EBCE students and difference in gains on attitudes towards others was statistically significant. Thus, it is concluded that the EBCE students gained at least as much as the comparison students on all four scales and gained significantly more on attitude toward others.

Table 6

Comparison of Pretest and Post-test Scores
of the EBCE and Comparison Students on
the Student Attitude Survey

		Pretest		Post-test					
Scale	Group	Mean	S.D.	Mean	S.D.	Gain	Diff. in Gains	F	p
Learning	EBCE	335.31	56.98	369.59	49.65	34.18	10.22	2.71	.12
	Comp.	333.39	51.62	359.36	56.79	23.96			
Careers	EBCE	378.31	49.26	400.53	54.22	22.22	4.65	.31	.56
	Comp.	374.02	44.93	391.59	61.73	17.57			
Self	EBCE	372.66	52.80	378.87	54.89	6.21	8.20	1.67	.25
	Comp.	364.63	46.44	362.64	57.08	1.99			
Others	EBCE	381.46	46.09	386.97	56.07	5.51	15.78	8.76	.01
	Comp.	382.72	40.22	372.45	58.52	10.27			

SOCIALIZATION PROFILE

The Socialization Profile was used to measure sex role attitudes. The higher the score, the more a person's attitudes reflect sex stereotyping. Scores on two scales are produced--attitudes toward male rolls and attitudes toward female roles. The results are shown in Table 7. As shown by that table, sex role attitudes of the EBCE students improved over the semester on both the male and female scales, while the sex role attitudes of the comparison students became worse on both scales. The difference in change of attitudes toward female roles between the two groups was statistically significant, favoring the EBCE students. Thus, it is concluded that the EBCE student attitudes toward female sex roles was improved more than the attitudes of the comparison students.

Table 7

Comparison of Pretest and Post-test Scores of the EBCE and Comparison Students on Socialization Profile

		Pretest		Post-test			Diff. in		
Scale	Group	Mean	S.D.	Mean	S.D.	Gain	Gains	F	p
Male	EBCE	1679.95	140.01	1668.24	150.05	11.71	53.17	3.04	.08
	Comp.	1662.70	125.84	1703.96	121.86	-41.46			
Female	EBCE	1650.82	138.04	1591.26	129.56	40.44	43.22	7.61	.01
	Comp.	1650.57	148.63	1653.35	156.54	- 2.78			

STUDENT ATTITUDE QUESTIONNAIRE

Student attitudes toward the EBCE program were gathered through an open-ended questionnaire administered at the end of the year. The questionnaire used is shown on a following page.

In general, the attitudes of the students toward the EBCE program were very positive. Some students, however, were critical of some aspects of the program and offered suggestions for improvement.

In comparing the EBCE program with regular school programs, the most frequently-mentioned aspect of the EBCE program was the meaningfulness of the program. They felt that learning was more meaningful through EBCE since they learned by doing and saw the practical application of what they were learning. They also liked the fact that, through EBCE, learning was self-directed and the responsibility was placed on them.

In describing their experiences at employer sites, students were most positive toward sites where they became involved and performed work rather than just watching. They were critical of sites where there was little for them to be actively involved in and where they were assigned routine, menial tasks. Typical comments were:

"It was boring because you couldn't really do anything."

"It was great because you could really get involved."

"Did pretty much the same thing which got boring."

"There was always something to do."

"They let me take a lot of responsibility."

"I got to do more than just watch."

"I got to contribute my own work."

"I disliked working there because there was nothing to do."

"It would have been better if I could have done more."

"A very good experience because I got to do a lot."

Some students learned from site experience that they definitely wanted to pursue a particular career while some decided against a career in a particular field after experience at a site. Several students commented that they learned that there is much more to a particular job than appears on the surface.

In listing strengths of the EBCE program, students listed most frequently:

- Individualization--sites and learning experiences chosen on the basis of individual interests

- Responsibility placed on students

- The opportunity to learn what jobs are really like

- The opportunity to explore a wide variety of jobs

- The development of self-confidence and self-reliance

In listing weaknesses of the program, by far the most frequently-mentioned aspect was the lack of communication that the students have with schools. That was mentioned by about one-third of the students. They missed their school friends and felt that there was too little communication concerning school activities. A few students also felt that resource materials were inadequate, transportation to sites was a problem, too many tests were given at the beginning and end of the program, and the Career Guide books and activity sheets were not as useful as they might be.

When asked to list the one thing they would change in the EBCE program, all the changes listed had to do with the weaknesses listed above.

Student Attitude Questionnaire Date _____

1. Compare the EBCE program to the type of structured class you had in previous years.

_____

_____

_____

_____

_____

2. List the employer sites you've been to and write a brief comment about each. (If you need additional space, write on back.)

A. _____

_____

B. _____

_____

C. _____

_____

D. _____

_____

3. In your opinion, the strengths of the EBCE program are:

A. _____

B. _____

C. _____

4. In your opinion, the weaknesses of the EBCE program are:

A. _____

B. _____

C. _____

5. If you could change <u>one</u> thing in this program, what would it be?

_____

_____

PARENT OPINION SURVEY

Parent opinions of the EBCE program were gathered through a Parent Opinion Survey. The items used and the responses are shown on the following pages. As shown by the results of the survey, parents were very positive toward the EBCE program.

Item 1 shows that only one parent felt their child would have been better off in a regular school program.

In response to Item 3, only one parent felt that, if they had to do it over again, they would not want their child to participate in the program.

As shown by Item 3, all parents felt their sons and daughters liked the EBCE program at least as well as the regular school program, the majority feeling that they liked it much better.

Weaknesses of the program, as listed in response to Item 4, were similar to those listed by students. The most frequently-mentioned weaknesses were lack of contact with the home schools and transportation.

In response to Item 5, the most frequently-mentioned strengths of the program were the opportunity to meet and work with a variety of people and helping students in choosing careers.

In response to Items 6 - 11, the parents felt that

- they received enough information about their children's progress.
- EBCE provided students much more opportunity to learn about occupations than the regular schools.
- EBCE helped their children form career plans.
- EBCE provided more opportunity for general learning than regular schools.
- students were more motivated to learn through EBCE.
- EBCE used good approaches to learning.

In response to Item 12, parents listed a wide variety of positive changes on the part of their children. The most frequently-mentioned positive changes were in the area of self-confidence, responsibility and career decisions.

In response to Item 13, few negative changes on the part of students were listed. Most of those that were listed had to do with lack of contact with classmates and school activities.

In response to Item 14, over half of the parents reported that their children talk with them about the EBCE program almost daily.

In response to Items 15 and 16, parents reported that they had not had frequent contact with the EBCE staff and that few had attended any meetings where other EBCE parents were present. However, in response to Items 17, 19 and 20, they rated the quality of the staff very high, rated their relation with the staff very good, and rated the enthusiasm of the staff as excellent.

As shown by Item 21, the EBCE parents were satisfied with their children's occupational plans.

Table 8

PARENT OPINION SURVEY

1. How well does the EBCE program compare overall with the past school experiences of your daughter or son?

Much Worse				Much Better
0	1*	5	14	16
1	2	3	4	5
0	3%	14%	39%	44%

2. If you had it to do over again, would you want your son or daughter to participate in the EBCE program?

Definitely NO				Definitely YES
0	1	1	6	28
1	2	3	4	5
0	3%	3%	17%	78%

3. How well do you think your son or daughter likes the EBCE program compared with past school experiences?

Much Worse				Much Better
0	0	2	13	21
1	2	3	4	5
0	0	6%	36%	58%

*For each item of this type, the top number is the number of parents who chose each response, the middle number is the response scale, and the bottom number is the percent choosing each response.

4. What do you think are the greatest weaknesses of the EBCE program?

(6) Students lose contact with school
(5) Transportation
(4) Some experience sites were not good
(3) More students should be able to participate
(3) Students don't learn as much academically
(2) Employers are not well enough informed
(2) Workbooks
(1) Shortages of places to work
(1) Lack of parent information
(1) Students too free to come and go from jobs
(1) Lack of cooperation and understanding on the part of school counselors and teachers
(1) Students visit too many sites
(1) Time at sites is too short
(1) Students have too much free time
(1) Students don't know what is expected of them

5. What do you think are the greatest strengths of the EBCE program?

(5) Meeting and working with a variety of people
(5) Helping students select careers
(3) Variety of job experiences
(3) Students find out what work is really like
(3) Students learn how businesses operate
(2) Individual attention to students
(2) Shows students skills needed for jobs
(2) Actual work experience
(2) Enthusiasm of staff
(1) Helps students find themselves
(1) Makes students aware of adult responsibilities
(1) Broadens student interests
(1) Exposure to actual duties of jobs
(1) Practical experiences
(1) Better opportunity for students who cannot learn from books

6. Have you received enough information about your son's or daughter's progress in the EBCE program?

Definitely NO				Definitely YES
1	3	6	7	19
1	2	3	4	5
3%	8%	17%	19%	53%

7. In comparison with regular schools, how much opportunity did the EBCE program provide your daughter or son for learning about occupations?

Much Less				Much More
0	0	2	8	26
1	2	3	4	5
0	0	6%	22%	72%

8. What effect, if any, has the EBCE program had on helping your son or daughter form career plans?

Definitely Bad				Definitely Good
0	1	1	11	23
1	2	3	4	5
0	3%	3%	31%	64%

9. In comparison with regular schools, how much opportunity did the EBCE program provide your daughter or son for general learning?

Much Less		About the Same		Much More
0	1	9	14	13
1	2	3	4	5
0	3	25%	39%	36%

10. In comparison with past experiences in regular schools, how motivated is your daughter or son to learn in the EBCE program?

Much Less		About the Same		Much More
0	0	6	11	19
1	2	3	4	5
0	0	17%	31%	33%

11. How would you rate the approaches to learning used in the EBCE program?

Poor				
0	0	6	11	19
1	2	3	4	5
0	0	17%	31%	53%

12. What positive changes have you noticed in your son or daughter that might be a result of participation in the EBCE program?

(8) Increased self-confidence
(4) More responsible
(4) Has made career decision
(2) Gets along better with people
(2) Thinks more about own future
(2) Communicates with parents more
(2) Is more interested in learning
(2) More mature
(2) Improved attitude toward work
(1) Pride in appearance
(1) More outgoing
(1) Learned to take orders
(1) Respect for others
(1) Happier
(1) Pride in self
(1) Desire for more education
(1) Better outlook toward life

13. What negative changes have you noticed in your son or daughter that might be a result of participation in the EBCE program?

(3) Misses school activities
(2) Misses classmates
(1) Decreased interest in academics

14. How often does your son or daughter talk to you about what's going on in the EBCE program?

Almost Never				Almost Daily
0	3	2	10	21
1	2	3	4	5
1	8%	6%	28%	58%

15. About how often have you had any contact with any EBCE program staff members?

Almost Never				Very Frequently
6	7	19	2	2
1	2	3	4	5
17%	19%	53%	6%	6%

16. How many meetings have you attended during this school year where other parents of EBCE students were present?

29	6	1	0	0
None	1	2	3	4 or More
81%	17%	3%	0	0

17. How would you rate the general quality of the EBCE program staff?

Poor				Excellent
0	0	0	13	23
1	2	3	4	5
0	0	0	36%	64%

18. How would you rate the business or community resources available in the EBCE program?

Poor				Excellent
1	1	16	9	9
1	2	3	4	5
3%	3%	44%	25%	25%

19. How would you rate your overall relationship with the staff of the EBCE program?

Poor				Excellent
1	0	6	10	19
1	1	3	4	5
3%	0	17%	28%	53%

20. How would you rate the enthusiasm of the EBCE program staff?

Poor				Excellent
0	0	2	4	30
1	2	3	4	5
0	0	6%	11%	83%

21. What do you think of the occupational plans of your daughter or son?

(14%) a. 5 There aren't any firm plans yet.

b. 0 The plans should be changed.

(83%) c. 30 The plans seem to be good.

(3%) d. 1 We haven't really had a chance to discuss the plans.

22. What do you think your son or daughter will be doing a year after high school?

(25%) a. 9 Working

(58%) b. 21 Attending some kind of college

(14%) c. 5 Going to a business or trade school

d. 0 Military

(3%) e. 1 Other (please specify)

23. How did you first hear about the EBCE program?

(20) Student
(7) School
(2) School counselor
(2) Local newspaper
(1) School board member

24. What kinds of students do you think benefit most from the EBCE program?

(12) Those uncertain about careers
(7) All
(3) Noncollege bound
(3) Those who dislike regular school
(1) Those seeking a business career
(1) Those who want to learn a trade
(1) Middle and low ability
(1) Bright but unsure about career
(1) Willing to learn
(1) Ambitious
(1) Independent
(1) High school juniors

RESOURCE PERSONS' OPINIONS

A questionnaire was used to determine the opinions of participating resource persons toward the EBCE program. The items used and the results are shown in Table 9. Responses were received from 55 resource persons.

As shown by the results, the resource persons were, in general, quite favorable toward the EBCE program. The results show that:

- all but two felt that the EBCE staff provided them with the necessary information to help them direct student activities (Item 1).

- in almost every case the EBCE staff explained the reason for a particular placement to the resource person. In a majority of the cases, the staff also showed the resource person the students' activity sheets and products expected from the students, and provided feedback on the students' progress (Item 2).

- most of the time, resource persons talked with the student about job opportunities and activities and about activities at the site, evaluated student assignments, supervised students in performing job-related tasks at the sites, and helped plan student assignments. Less frequently they talked to students about personal problems, provided tutoring in academic area, and assisted students with nonjob-related assignments (Item 3).

- students spent most of their time at the sites observing site activities, researching from site materials, performing site activities, talking with the resource persons, and talking with other site personnel. They spent less time in individual study at the site (Item 4).

- most of the resource persons felt the students were interested in their sites (Item 5) and were interested in the concept of EBCE (Item 6).

- employees and top-level management were, in general, very favorable toward the program (Items 7 and 8).

- most of the resource persons were satisfied with the feedback they received relating to what happens to students after they leave the site but several commented they had received little of that type of feedback (Item 9).

- only one resource person felt that the company would not continue working with the EBCE program (Item 10).

- most resource persons rated the EBCE program as being effective. Only one rated it fair and one rated it as a total failure (Item 11).

- almost all the resource persons felt the program functioned as they were led to believe when recruited as an employer site (Item 12).

- the most frequently mentioned strengths of the EBCE program listed had to do with helping students choose careers and learning about jobs first hand (Item 13).

- the resource persons listed few weaknesses of the program. The most frequently mentioned weaknesses were contradictory. Four resource persons felt that students spent too little time at the sites while four others felt they spent too much (Item 14).

- about half the resource persons felt the students had an impact on their sites. The greatest impact was on the amount of work performed by regular employees. In only one case was the impact felt to be bad (Item 15.)

Table 9

Resource Persons' Questionnaire Responses

Questions

1. Did the EBCE staff provide you with the necessary information to help you direct students' activities at your site?

   Yes 53 (96%) No 0 (0%) Sometimes 2 (4%)

2. Did the EBCE staff usually

38 (69%) show you the student Activity Sheet(s)?

23 (42%) show you the Student Program Profile?

29 (53%) show you the type of products expected from student?

51 (93%) explain reason for the particular placement?

38 (69%) provide you with feedback on student's progress?

3. Which of the following supportive services do you (or others at your site) provide for the Experience Based Career Education (EBCE) program students? (Check each appropriate category)

	Frequently	Occasionally	Seldom	Never
Do you talk job opportunities?	36(65%)	19(35%)	0(0%)	0(0%)
Do you talk about the students' personal problems?	9(16%)	13(24%)	22(40%)	11(20%)
Do you talk about activities at your site?	49(89%)	6(11%)	0(0%)	0(0%)
Do you tutor in an academic area?	13(24%)	6(11%)	13(24%)	23(42%)
Do you evaluate individual students' assignments?	27(49%)	18(33%)	1(2%)	9(16%)
Do you assist students in nonjob-related assignments?	7(13%)	11(20%)	8(15%)	29(53%)
Do you supervise students to perform a specific job-related task at your site?	42(76%)	10(18%)	2(4%)	1(2%)
Do you help plan student assignments?	25(45%)	13(24%)	6(11%)	11(20%)

4. How do students spend their time at your site? (Check each appropriate category.)

	Frequently	Occasionally	Seldom	Never
Observing site activities	48(87%)	7(13%)	0(0%)	0(0%)
Researching from site materials	13(24%)	23(42%)	11(20%)	8(15%)
Actively performing site activities	36(65%)	11(20%)	6(11%)	2(4%)
Talking with me	32(58%)	21(38%)	2(4%)	0(0%)
Talking with other site personnel	29(53%)	15(27%)	9(16%)	2(4%)
Individual study	8(15%)	18(33%)	22(40%)	10(18%)

Other (specify) _____

5. Do you think the EBCE students have been interested in your site?

Yes 42(76%) No 3(5%) Don't know 10(18%)

6. Based on the EBCE students placed at your site, do you feel these students were interested in the concept of EBCE?

Yes 48(87%) No 2(4%) Don't know 5(9%)

7. How have employees at your site reacted to the EBCE students placed at your site?

(11) Very good
(9) Good
(7) Enjoyed working with students
(3) No problem
(3) Helpful to students
(2) Interested in the students
(2) Readily accepted students
(2) Positively
(1) Assisted students
(1) Very cooperative
(1) Semi-favorably
(1) Indifferent
(1) Some employees unwilling to take the time to help students

8. How has top-level management reacted to the EBCE students placed here?

(15) Good
(7) Very good

(3) Positively
(2) Enjoyed working with students
(2) No problem
(1) Accepted students
(1) Very agreeable
(1) Very interested
(1) Very cooperative
(1) Satisfactory
(1) Mixed
(1) Felt it helps company as well as students
(1) Felt it was a waste of time

9. Have you been satisfied with the feedback that you received relating to what happens to the student after he leaves your site?

Yes 38(86%) No 6(14%) Comment: _____

10. Do you think your company will continue working with the EBCE project during the next couple of years?

Yes 46(84%) No 1(2%) Don't know 8(15%)

11. Based on the students and staff you've met, how effective do you feel the program was?

(24) Very effective
(10) Good
(1) Successful
(1) Great
(1) Positive
(1) Fair
(1) Total failure

12. Do you feel the program functioned as you were led to believe when you were recruited as an employer site?

Yes 49(89%) No 3(5%) Don't know 3(5%)

13. What do you feel the strengths of the EBCE program are?

(10) Helps students choose career
(8) Students learn job duties first hand
(5) Helps students understand career
(3) Students learn both good and bad about jobs
(3) Helps students find interests
(2) Provides an alternative for students
(2) Practical application
(2) Students meet all kinds of people
(1) Exposes students to various job situations
(1) Different experience for students
(1) On-the-job training

(1) Students learn to deal with public
(1) Gives students an opportunity to try a job without long-term committment
(1) Gives students a feeling of being part of the business
(1) Provides insight into the real world
(1) Good environment for students
(1) Provides good functional background
(1) Broadens students' view of adult world
(1) Gives businesses a chance to discover good employees

14. What do you feel the weaknesses of the EBCE program are?

(4) Students spend too little time at sites
(4) Students spend too much time at sites
(2) Some students use program just as an excuse to get out of school
(1) Students lack background to gain from some sites
(1) Not enough feedback from staff to know if employee is filling needs of students
(1) On some jobs students have to observe more than participate
(1) Some assignments are too difficult
(1) Poor student placement
(1) No value for employee
(1) Student given too much busy work
(1) Should start as juniors
(1) More students should participate

15. To what extent has the EBCE program had an impact on. . . .? (Check each appropriate category.)

	How Much Impact				Value of Impact		
	No Impact	Some Impact	Much Impact	Don't Know	Good Impact	Bad Impact	Don't Know
a. Quality of work performed by regular employees	29(54%)	15(28%)	8(15%)	2(4%)	19(83%)	1(4%)	3(13%)
b. Amount of work performed by regular employees	23(43%)	19(35%)	10(19%)	2(4%)	19(83%)	1(4%)	3(13%)
c. Company hiring practices	36(67%)	8(15%)	2(4%)	8(15%)	11(73%)	1(7%)	3(20%)
d. Company training practices	29(54%)	11(20%)	8(15)	6(11%)	17(89%)	0(0%)	2(11%)
e. Other possible impacts (list)							
_____							
_____							

SEX ROLE STEREOTYPING

One of the objectives of the EBCE program was to provide opportunities for experience site placement without consideration of traditional sex roles. Table 10 shows the experience sites (jobs) available in each of these EBCE areas, the number of those jobs that were traditionally male and female, and the number of the jobs filled by a resource person of the opposite sex. The male/female/both classifications were determined by the staff following guidelines established by the Sex Role Stereotype Subcommittee. They determined which jobs were traditionally held by males, females, or both. Traditional male jobs included: police person, funeral director, veterinarian, store manager, newspaper editor, machinist and meat cutter. Examples of traditionally female jobs included: nurse, elementary teacher, secretary, home economist, librarian and beautician. Examples of jobs that were classified as "both" included: high school teacher, sales person, medical technician and potter. As shown by table 10, of the 135 job sites available, 63 were traditionally male, 44 were traditionally female, and 28 were classified as both male and female.

Table 10 also shows the number of female resource persons holding traditionally male jobs and the number of male resource persons holding traditionally female jobs. As shown there were 12 (8.9%) females holding traditionally male jobs and an equal number of males holding traditionally female jobs. Thus in all there were 24 (17.8%) resource persons holding jobs that were not traditional for their sex.

Tables 11 and 12 show the student site explorations according to whether they were traditional or non-traditional according to the students' sex. Table 11 shows those figures by numbers of explorations and table 12 shows them by number of students. As shown by table 11, 26.5 percent of the site explorations were in nontraditional sex roles; 9.2% of the explorations by the boys were in nontraditional job roles, while 39.3% of the explorations by girls were in nontraditional job roles.

As shown by table 12, over half (53.4 percent) of the students explored a nontraditional job at least once. Three-fourths of the girls explored nontraditional jobs while about one-fourth (26.9%) of the boys did so. Examples of nontraditional jobs explored by boys included kindergarten teachers, librarian and fifth grade teacher. Examples of nontraditional jobs explored by girls included: draftsman, veterinarian, commerical photographer, store manager and policeperson.

Table 13 shows the site explorations with resource persons of the opposite sex. As shown, over half of the students had at least one site exploration with a resource person of the opposite sex. Female students had more site explorations with male resource persons (87.50 percent) than did male students with female resource persons (30.77 percent). Overall, eleven boys (42.31 percent) and 29 girls (90.63 percent) for a total of 40 of the 58 students (68.97 percent) had at least one site experience that was nontraditional and/or involved a resource person of the opposite sex.

TABLE 10

TRADITIONAL AND NONTRADITIONAL JOB SITES AVAILABLE

Area	No. of Exper. Sites	Traditional Male Jobs	Traditional Female Jobs	Traditional Both Jobs	No. of Female Resource Persons in Traditionally Male Jobs	No. of Male Resource Persons in Traditionally Female Jobs	Total Resource Persons in nontraditional jobs N	Total Resource Persons in nontraditional jobs %
Storm Lake	86	44	24	18	7	7	14	16.3
Sac City	29	8	15	6	3	4	7	24.1
Pocahontas	20	11	5	4	2	1	3	15.0
Totals	135	63	44	28	12	12	24	17.8

TABLE 11

TOTAL NONTRADITIONAL SITE EXPLORATIONS

	Total Exploration			Nontraditional Exploration					
				Male		Female		Total	
Area	Male	Female	Total	N	%	N	%	N	%
Storm Lake	77	68	145	7	9.1	30	44.1	37	25.5
Sac City	7	29	36	1	14.3	6	20.7	7	19.4
Pocahontas	3	20	23	0	0.0	10	50.0	10	43.5
Totals	87	117	204	8	9.2	46	39.3	54	26.5

TABLE 12

NONTRADITIONAL SITE EXPLORATIONS, BY STUDENT

Area	Total Students			Students Making at Least One Nontraditional Exploration					
				Male		Female		Total	
	M	F	T	N	%	N	%	N	%
Storm Lake	22	18	40	6	27.3	15	83.3	21	52.5
Sac City	3	8	11	1	33.3	4	50.0	5	45.5
Pocahontas	1	6	7	0	0.0	5	83.3	5	71.4
Totals	26	32	58	7	26.9	24	75.0	31	53.4

TABLE 13

Site Explorations with Resource Persons of the Opposite Sex

	Students		
	Males	Females	Total
Number of students	26	32	58
Number of students having at least one site exploration with a resource person of the opposite sex.	8	28	30
Percent of students having at least one site exploration with a resource person of the opposite sex.	30.77	87.50	51.72
Total number of site explorations	87	117	204
Number of site explorations with resource person of the opposite sex	9	56	65
Percent of site explorations with resource person of the opposite sex.	10.34	47.86	31.86

TABLE 14

JOB EXPLORATIONS INVOLVING RESOURCE PERSONS IN

NONTRADITIONAL ROLES

	Explorations	Number of Students having at least one of this type exploration
Girls with Males in female jobs	14	11
Girls with females in male jobs	11	10
Boys with males in female jobs	3	3
Boys with females in male jobs	3	3
Totals	31	25 *

* Individual figures do not add to total because of duplicates.